



\$50,000 To The Aviator First Across The Atlantic!

Lord Northcliffe,
Wealthy London
Publisher, Places
Pot of Gold at End
of International
Rainbow
and
Bids
Flyers
Prepare
Themselves to
Capture
It.



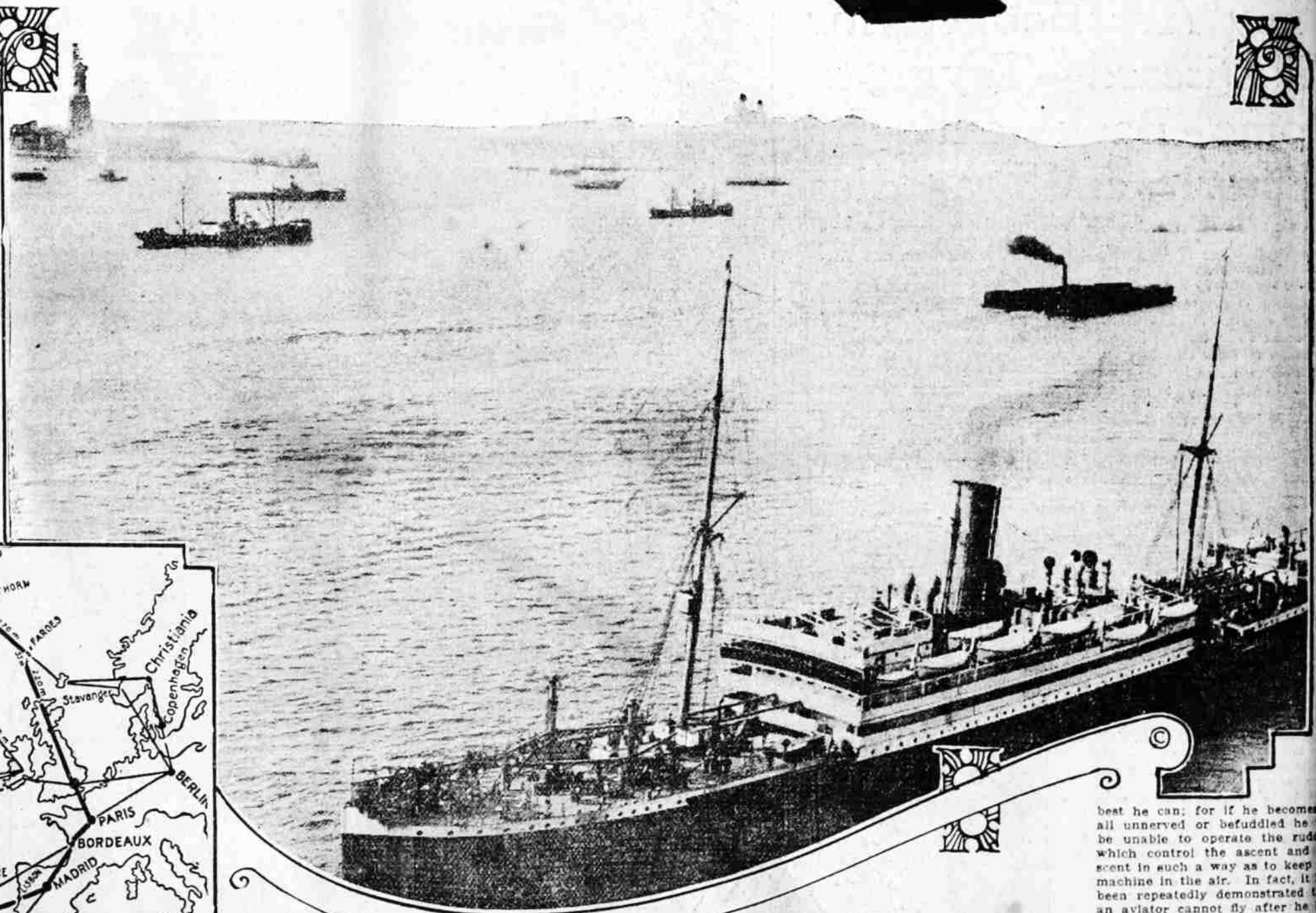
**Feats Inspired by
Big Cash Prizes of
Lord Northcliffe**

The flight from Dover to Calais across the English Channel, Lord Northcliffe offered a prize of \$100,000, in 1908, which was won by Louis Blériot, a French aviator, on July 25, 1909.

The flight from London to Manchester, England, Lord Northcliffe offered a prize of \$50,000 in 1909, and it was captured by Louis Paulhan, also a French aviator, less than a year after the offer was made.

The making of a complete circuit flight around England, Lord Northcliffe offered a prize of \$100,000 in 1911, and again within a year, at a race held, Jules Vedrines and Andre Beaumont, both Frenchmen, completed the circuit without accident or mishap.

pends entirely on the pilot's feeling. A lack of confidence on his part, or worse yet, a temporary lapse of consciousness, invariably ends with his drifting down and landing.

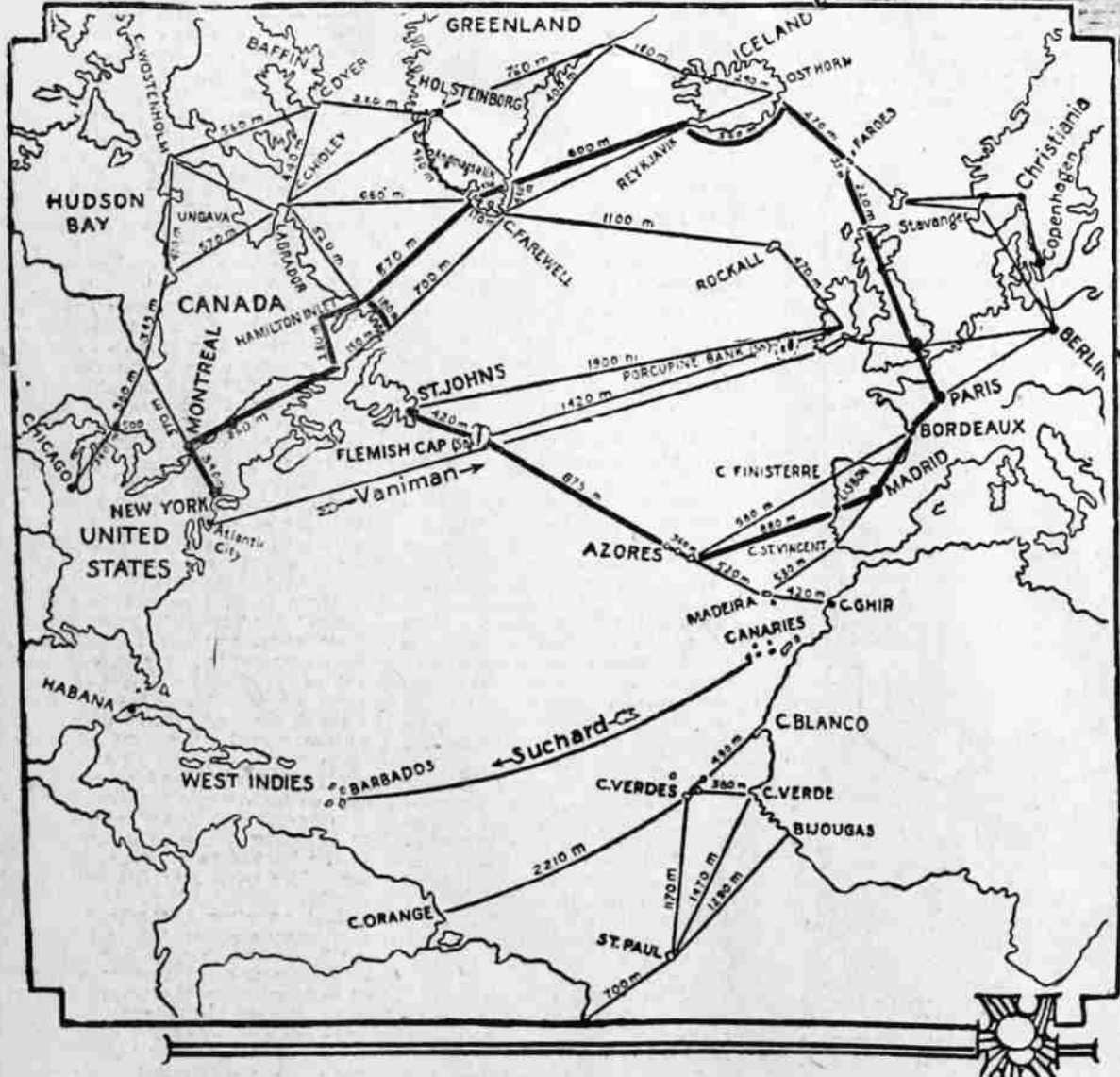


best he can; for if he becomes all unnerfed or befuddled he will be unable to operate the rudder which control the ascent and descent in such a way as to keep the machine in the air. In fact, it has been repeatedly demonstrated that an aviator cannot fly after he has once lost his feeling of security and control.

"Consequently, for a flight of four hours it would be necessary to have three pilots, with two always on duty, and one resting at intervals in the cabin. This would insure continuous efficient service of the wheel, as well as constant attention to the motors. Of course the pilots necessary to undertake this flight would have to be good navigators as well as good operators of aeroplanes. To secure such men in America would be somewhat difficult at present, unless naval officers were employed; but in Europe it would be less difficult. However, good seamen could readily be secured and trained to accomplish the flight."

So you see the flight can be made. It now is a question of who will make it. Will the prize go, as have the other magnificent ones given by Lord Northcliffe for the promotion of aviation, to a Frenchman? It is a lamentable fact, from the American point of view, that although this country is the birthplace of the aeroplane, Europe, and France, in particular, now leads in the science. True, we have aviators who are as expert, if not more so, than any in Europe; but there are more experts in Europe and the development of the science receives more substantial encouragement. But true Americans are clinging to the hope that one of our own daring birdmen will add another glorious achievement to the long list that American history and pluck has recorded in history pages.

That the feat will be accomplished there is no doubt, as have said Lord Northcliffe's offers in the past always have been as forecasts of things about to be accomplished, and, as you have seen, there is nothing, aside from the element of chance—mainly represented by possible weather conditions—that would make it an impossibility. Lord Northcliffe's present offer of \$50,000, therefore, is regarded as a forecast based on the swift progress made in aviation.



From New York to Paris in seventy-two hours in a boat with wings. Sounds like a dream, doesn't it? Yet it is not all a dream—no more of a dream at any rate than was a flight from Dover to Calais, across the English Channel, in 1908 when Lord Northcliffe, the wealthy publisher of the London Daily Mail, started the world by offering a prize of \$100,000 for its accomplishment. Nor any more of a dream than a flight from London to Manchester and a flight circling England, both of which also were accomplished after this far seeing and generous Englishman had offered large prizes to spur aviators to attempt them.

And now Lord Northcliffe goes even further and forecasts the crossing of the Atlantic in an airship in seventy-two hours in the near future by offering a prize of \$50,000 for the aviator who first accomplishes this feat. In the other cases where he offered prizes for seemingly impossible feats, they were won within a year after the offers were made. So it does not seem so much of a dream after

all to predict that a boat with wings will soon speed across the mighty Atlantic from America to Europe and mark an epoch in the history of aviation. Lord Northcliffe has hung a pot of gold at the end of the international rainbow and bids the flyers prepare themselves to capture it. Will they do it? Let us consider what such a flight entails and how it might be accomplished.

Lord Northcliffe has specified that the flight must be made in a hydro-aeroplane in seventy-two hours. It may be made from any point in the United States, Canada, or Newfoundland or any point in Great Britain or Ireland. But to make the trip within the time limit the selection of a route is vital. Men who are expert in aviation, say any route of more than 3,500 miles is out of the question. While it may be possible to construct a craft which can attain a speed of between sixty and one hundred miles an hour, they say, the possible draft and other unknown quantities make it necessary to have a broad margin of time. A

single sustained flight also is more likely of success, they say, than a series of flights with landings on water and therefore the shortest routes are the best.

SIX ROUTES ARE SUGGESTED.

The following routes have been suggested:

1. From Newfoundland to Ireland, about 1,900 miles.
2. From Newfoundland to the Azores, about 1,200 miles.
3. From New York to Paris, via Labrador, Greenland, Iceland, Faroe Islands, and Scotland—about 4,500 miles (compared with 2,500 miles via steamer and rail), and with the longest necessary stretch of water 270 miles.
4. A similar southern route via the West Indies, South America, Cape Verde Islands, Africa and Spain—about 2,400 miles with one water stretch of 1,280 miles. And, by the use of a large scow, ship, or float, as a supply station anchored in shoal water off Newfoundland Bank.
5. Newfoundland Bank (Flemish Cap) to the Azores, 870 miles.

6. Flemish Cap to a similar scow anchored off Porcupine Bank (to the west of Ireland), about 1,400 miles.

The map accompanying this article shows various routes that may be chosen for air travel between North and South America with their adjacent islands and Europe. The South American routes traverse the African coast. Distances are given approximately to nearest ten (land or English statute miles). One such mile is equal to 1.61 kilometers. This map is on the Gnomonic Projection, and is compiled with reference more to the geographical location of the land masses than to the topographical or meteorological conditions obtaining. Of the above routes two have been selected by the Vaniman and "Suchard" expeditions, both of which are nearly ready. The favorable routes shown in heavy lines are suitable for both motor planes and motor balloons. The alternative and other routes are shown in lighter lines.

Do the distances shown on the map make you gasp when you consider their accomplishment by a heavier-than-air craft? Again do you murmur "impossible." Reflect that flights of from 500 to 1,000 miles now are quite common in Europe. Consider the following list of flights made within the last three months—flights of from 255 to 1,375 miles, flying entirely by compass direction, and consider if it is wild to prophesy the crossing of the Atlantic Ocean within a year.

Here are some of the long flights made by daring and skillful European aviators within the last three months:

| Aviator | Route | Dist. in miles |
|------------|--------------------------------|----------------|
| Gulliaux | Paris-Merignac | 250 |
| Letort | Paris-Berlin | 674 |
| Janoir | Stampos-Namur | 250 |
| Gilbert | Paris-Victoria (Spain) | 459 |
| Gulliaux | Paris-Caceres (Spain) | 500 |
| Janoir | Stampos-Bremen | 700 |
| Sequin | Paris-Alais-Chapelle | 200 |
| D. Marmier | Berlin-Paris | 674 |
| Letort | Hamburg-Bruckel (near Hamburg) | 100 |
| Gulliaux | Paris-Darmstadt | 500 |

As aviators dispute over the best possible route for crossing the Atlantic they also dispute as to the type of aircraft best suited for the trip. Most experts, however, say that the aeroplane that eventually will make the flight will be a boat with wings. The most efficient aeroplane today, they say, is the airboat.

The airboat has developed rapidly within the last few years. It first was developed by putting floats on an aeroplane to keep it from sinking. In 1911 Glenn H. Curtiss, the aviator and inventor, replaced the floats with a pontoon and in 1912 he substituted a body shaped like a boat. This latter has been developing in size and shape to such an extent that the next step promises to be a regular air-yacht.

The airboat that crosses the Atlantic and captures the pot of gold at the end of the international rainbow

which would be necessary to finance the constructing of a special machine and equipping it for the trip. The aeroplane should be capable of flying at a minimum speed of fifty miles an hour with a load of about 4,000 pounds of fuel and equipment. Over 2,000 pounds of this weight would be fuel, which being consumed would lighten the aeroplane and thereby increase the speed to possibly ninety miles an hour. To carry such a weight an aeroplane would have to have a spread of about 120 feet; and it would have to be biplane, for the double set of wings would afford a greater lifting capacity.

To drive an aeroplane of this size, with such a load, would require a minimum of 300 horsepower, which would have to be doubled so as to assure an independent reserve in case of an accident.

The size of such an aeroplane is not quite double that of the largest aeroplane in existence, the Sikorsky biplane, which holds the record of carrying seven passengers in a flight of nearly two hours' duration at an altitude of 5,600 feet, and its construction therefore is not impossible from a mechanical standpoint.

The main problem, experts say, will be weather conditions, operating the machine and navigating it across the ocean.

"The difficulties involved," says an expert, who has given much serious study to the problems presented, "are due principally to the fact that this air voyage never has been made before; the obstacle to be encountered is unfamiliarity, not impossibility."

"Granting that an aeroplane can be constructed that can fly for forty hours continuously at a speed ranging between 50 miles with full load and 70 miles with less load, the next problem is to have the human factor to keep the aeroplane in flight for that length of time. Flying, keeping the aeroplane in the air, is a psychologic process; it de-

LORD NORTHCLIFFE AT UPPER LEFT.

| | | |
|-------------------|--|-------|
| Jansen | Valencennes-Peterwald | 1,000 |
| D. Marimer | Frontier village of Romania | 450 |
| Lord Cadbury | Paris-Berlin | 674 |
| Baron Pasquier | Paris-London | 267 |
| Janoir | Stampos-Bordeaux | 674 |
| Levasseur | Paris-Berlin | 674 |
| Commander Felix | Paris-London | 267 |
| Graham-White | London-Paris | 267 |
| Chemet | London-Paris | 267 |
| Audemars | Paris-Berlin | 674 |
| Havens | Chicago-Detroit-Buffalo | 1,000 |
| Friedrich | Berlin-Paris | 674 |
| Lieut. Scarpa | Turin-Fordone | 250 |
| Stoeffler | Muhlhausen-Interburg | 250 |
| Colonial Aviators | Hakka-Tunis-Alger | 700 |
| Colonial Aviators | Casablanca-Pis and a score of flights across the Sahara Desert | 500 |
| Gertze | Paris, near Cannes, France, across the Atlantic Sea to Tunis, Africa | 600 |
| Thulin | Across the Baltic from Landskrona to Stralsund, in two hours, at a rate of 155 miles an hour | 212 |
| Stoffler | Flight ending at Muhlhausen, Germany | 1,375 |